

Department of Environmental Quality

Amanda Smith Executive Director

DIVISION OF AIR QUALITY Bryce C. Bird Director

DAQE-AN143610003-15

April 7, 2015

Ximena Simmons EP Energy E&P Company, L.P. PO Box 4660 Houston, TX 77210

Dear Ms. Simmons:

Re: Approval Order: Modification to Approval Order DAQE-AN143610002-13 to Increase

Production

Project Number: N14361-0003

The attached document is the Approval Order for the above-referenced project. Future correspondence on this Approval Order should include the engineer's name as well as the DAQE number as shown on the upper right-hand corner of this letter. The project engineer for this action is Mr. Todd Wetzel, who may be reached at (801) 536-4429.

Sincerely,

Bryce C. Bird Director

BCB:TW:jc

cc: TriCounty Health Department

STATE OF UTAH

Department of Environmental Quality

Division of Air Quality

APPROVAL ORDER: Modification to Approval Order DAQE-AN143610002-13 to Increase Production

Prepared By: Mr. Todd Wetzel, Engineer

Phone: (801) 536-4429 Email: twetzel@utah.gov

APPROVAL ORDER NUMBER

DAQE-AN143610003-15

Date: April 7, 2015

EP Energy E&P Company, L.P. Houston 1-34Z1 Production Tank Battery

Source Contact:

Ximena Simmons, Environmental Specialist

Phone: (713) 997-5144

Email: Ximena.Simmons@EPEnergy.com

Bryce C. Bird Director

Abstract

EP Energy E&P Company, LP (EP Energy) has requested a modification to AO DAQE-AN143610002-13, dated February 11, 2013, to increase production at the Houston 1-34Z1 Crude Oil and Natural Gas Production Tank Battery. An electric pumpjack will bring produced fluids to the surface from the well A heater treater will separate the oil, water, and gas. The oil and water will be stored in tanks prior to being transported off site by trucks. The gas will be used as fuel for the onsite equipment or will be routed to a sales pipeline and shipped off site. This facility will process up to 102,200 barrels of crude oil per year increased from 55,000 barrels (1 barrel = 42 gallons).

The source is located in Duchesne County, which is an unclassified area for ozone and attainment for all other criteria pollutants. NSPS 40 CFR 60 Subpart A and Subpart OOOO apply to this source. NESHAP 40 CFR 61, and MACT 40 CFR 63 regulations do not apply to this source. Title V of the 1990 Clean Air Act does not apply to this source.

The potential emissions, in tons per year, will change as follows: PM_{10} -0.03 (which includes $PM_{2.5}$), $PM_{2.5}$ -0.03, NO_x -0.56, SO_2 +0.01, CO -1.70, VOC -4.36, HAPs -0.51, and CO_2e -835.

The potential emissions, in tons per year, will be as follows: $PM_{10} = 0.12$ (which includes $PM_{2.5}$), $PM_{2.5} = 0.12$, $NO_x = 2.27$, $SO_2 = 0.01$, CO = 4.78, VOC = 8.04, HAPs = 0.70, and $CO_2e = 3.068$.

This air quality AO authorizes the project with the following conditions and failure to comply with any of the conditions may constitute a violation of this order. This AO is issued to, and applies to the following:

Name of Permittee:

Permitted Location:

EP Energy E&P Company, L.P. PO Box 4660 Houston, TX 77210

EP Energy E&P Company, L.P.- Houston 1-34Z1 Production Tank Battery SE-NW Sec34 T1N R1W Duchesne County, UT

UTM coordinates: 585,950 m Easting, 4,477,298 m Northing, UTM Zone 12

SIC code: 1311 (Crude Petroleum & Natural Gas)

Section I: GENERAL PROVISIONS

- I.1 All definitions, terms, abbreviations, and references used in this AO conform to those used in the UAC R307 and 40 CFR. Unless noted otherwise, references cited in these AO conditions refer to those rules. [R307-101]
- I.2 The limits set forth in this AO shall not be exceeded without prior approval. [R307-401]
- I.3 Modifications to the equipment or processes approved by this AO that could affect the emissions covered by this AO must be reviewed and approved. [R307-401-1]
- 1.4 All records referenced in this AO or in other applicable rules, which are required to be kept by the owner/operator, shall be made available to the Director or Director's representative upon request, and the records shall include the two-year period prior to the date of the request. Unless otherwise specified in this AO or in other applicable state and federal rules, records shall be kept for a minimum of two (2) years. [R307-401-8]
- I.5 At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any equipment approved under this AO, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to

the Director which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. All maintenance performed on equipment authorized by this AO shall be recorded. [R307-401-4]

- The owner/operator shall comply with UAC R307-107. General Requirements: Breakdowns. [R307-107]
- I.7 The owner/operator shall comply with UAC R307-150 Series. Inventories, Testing and Monitoring. [R307-150]

Section II: SPECIAL PROVISIONS

II.A The approved installations shall consist of the following equipment:

- II.A.1 Houston 1-34Z1 Production Tank Battery
- II.A.2 **Two (2) Oil Storage Tanks** Capacity: 625 barrels (each)
- II.A.3 One (1) Combustor
 Maximum Capacity: 2.1 MMBtu/hr
- II.A.4 One (1) Produced Water Storage Tank

Capacity: 600 barrels

II.A.5 One (1) Emergency Overflow Tank

Capacity: 600 barrels

II.A.6 Miscellaneous Storage Tanks

Storage of motor oil, methanol, glycol, etc.

Maximum Total Capacity: 1,025 gallons (combined)

- II.A.7 Truck Loading Operations
- II.A.8 **Boilers & Heaters**

Includes: heater treaters, separators, and other natural gas fired process equipment Maximum Total Capacity: 4.5 MMBtu/hr (combined)

Fuel: Natural Gas

II.A.9 Electric Driven Pumpiack

**For informational purposes only

II.B Requirements and Limitations

II.B.1 Site Wide Requirements

- II.B.1.a Unless otherwise specified in this AO, the owner/operator shall not allow visible emissions from any stationary point or fugitive emission source on site to exceed 10 percent opacity. [R307-401-8]
- II.B.1.a.1 Unless otherwise specified in this AO, opacity observations of emissions from stationary sources shall be conducted according to 40 CFR 60, Appendix A, Method 9. [R307-201-3]

II.B.2 Tank Requirements

- II.B.2.a The owner/operator shall not produce more than 102,200 barrels (1 barrel = 42 gallons) of crude oil per rolling 12-month period. [R307-401-8]
- II.B.2.a.1 To determine compliance with a rolling 12-month total, the owner/operator shall calculate a new 12-month total by the twentieth day of each month using data from the previous 12 months. Records of crude oil production shall be kept for all periods when the plant is in operation. Crude oil production shall be determined by process flow meters and/or sales records. [R307-401-8]
- II.B.2.b The owner/operator shall load the tanker trucks on site by the use of submerged loading. [R307-401-8]
- II.B.2.c The owner/operator shall keep the storage tank thief hatches closed and latched except during tank unloading or other maintenance activities. [R307-401-8]
- II.B.2.d The owner/operator shall inspect the thief hatches at least once every six months to ensure the thief hatches are closed, latched, and the associated gaskets, if any, are in good working condition. Records of thief hatch inspections shall include the date of the inspection and the status of the thief hatches. [R307-401-8]

II.B.3 <u>Combustor Requirements</u>

- II.B.3.a All exhaust gas/vapors from the oil storage tanks shall be routed to the operating combustor. [R307-401-8]
- II.B.3.b The combustor shall operate with no visible emissions. [R307-401-8]
- II.B.3.b.1 Visual determination of smoke emissions from the combustor shall be conducted according to 40 CFR 60, Appendix A, Method 22. [R307-401-8]

II.B.4 <u>Leak Detection and Repair Requirements</u>

II.B.4.a The owner/operator shall conduct a leak detection inspection for each valve(s), flange(s) or other connection, pump(s), compressor(s), pressure relief device(s) or other vent(s), process drain(s), open-ended valve(s), pump seal(s), compressor seal(s), and access door seal(s) or other seal containing or contacting a process stream with hydrocarbons that is associated with each of the approved emission unit listed in Section II: Special Provisions.

Leak detection inspections shall be conducted according to the following schedule:

- A. No later than 180 days from the date of this AO.
- B. At least once every 12 months after the initial leak detection inspection.

[R307-401-8]

- II.B.4.b Inspections shall be conducted in one of two ways:
 - 1. An analyzer that meets U.S. EPA Method 21, 40 CF R Part 60, Appendix A
 - 2. An optical gas imaging instrument as defined in 40 CFR 60.18(g)(4)

The optical gas imaging instrument must meet requirements specified in 40 CFR 60.18(i)(3).

Any emissions detected with an optical gas imaging instrument shall be considered a leak in need of repair unless the owner/operator evaluates the leak with an analyzer meeting U.S. EPA

Method 21, 40 CFR Part 60 and the analyzer reading is less than 500 ppmv. A reading of 500 ppmv or greater shall be considered a leak in need of repair.

Emissions detected from tank gauging, load-out operations, venting of pneumatics, properly operating pressure relief valves, or other maintenance activities shall not be considered leaks.

[R307-401-8]

- II.B.4.c The owner/operator is exempt from inspecting a valve, flange or other connection, pump or compressor, pressure relief device, process drain, open-ended valve, pump or compressor seal system degassing vent, accumulator vessel vent, agitator seal, or access door seal under any of the following circumstances:
 - A. The contacting process stream only contains glyc ol, amine, methanol, or produced water.
 - B. Monitoring could not occur without elevating the monitoring personnel more than six feet above a supported surface or without the assistance of a wheeled scissor-lift or hydraulic type scaffold.
 - C. Monitoring could not occur without exposing monitoring toring personnel to an immediate danger as a consequence of completing monitoring.
 - D. The item to be inspected is buried, insulated in a manner that prevents access to the components by a monitor probe, or obstructed by equipment or piping that prevents access to the components by a monitor probe.

[R307-401-8]

II.B.4.d If a leak is detected at any time, the owner/operator shall attempt to repair the leak no later than 5 calendar days after detection. Repair of the leak shall be completed no later than 15 calendar days after detection, unless parts are unavailable or unless repair is technically infeasible without a shutdown. The owner/operator shall inspect the repaired leak no later than 15 calendar days after the leak was repaired to verify that it is no longer leaking.

If replacement parts are unavailable, the replacement parts must be ordered no later than 5 calendar days after detection, and the leak must be repaired no later than 15 calendar days after receipt of the replacement parts.

If repair is technically infeasible without a shutdown, the leak must be repaired by the end of the next shutdown. If a shutdown is required to repair a leak, the shutdown must occur no later than 6 months after the detection of the leak unless the owner/operator demonstrates that emissions generated from the shutdown are greater than the fugitive emissions likely to result from delay of repair.

[R307-401-8]

- II.B.4.e Records of inspections and leak detection and repair shall include the following:
 - A. The date of the inspection
 - B. The name of the person conducting the inspection
 - C. Any component not exempt under II.B.4.c that is not inspected and the reason it was not inspected
 - D. The identification of any component that was det ermined to be leaking

- E. All records shall be maintained for optical gas imaging instrument as per 40 CFR 60.18(i)(4)(vi)
- F. The date of first attempt to repair the leaking component
- G. Any component with a delayed repair
- H. The reason for a delayed repair
 - 1. For Unavailable Parts:
 - i. The date of ordering a replacement component
 - ii. The date the replacement component was receiv ed
 - 2. For a Shutdown:
 - i. The reason the repair is technically infeasibl
 - ii. The date of the shutdown
 - iii. Emission estimates of the shutdown and the r epair if the delay is longer than 6 months
- I. Corrective action taken
- J. The date corrective action was completed
- K. The date the component was verified to no longer be leaking
- L. The records of each component exempt under II.B. 4.c
 - 1. Type of component
 - 2. Description of qualifying exemption

[R307-401-8]

Section III: APPLICABLE FEDERAL REQUIREMENTS

In addition to the requirements of this AO, all applicable provisions of the following federal programs have been found to apply to this installation. This AO in no way releases the owner or operator from any liability for compliance with all other applicable federal, state, and local regulations including UAC R307.

NSPS (Part 60), A: General Provisions

NSPS (Part 60), OOOO: Standards of Performance for Crude Oil and Natural Gas Production, Transmission and Distribution

PERMIT HISTORY

This AO is based on the following documents:

Is Derived From NOI dated October 28, 2014

Supersedes DAQE-AN143610002-13 dated February 11, 2013

ADMINISTRATIVE CODING

The following information is for UDAQ internal classification use only:

Duchesne County CDS B NSPS (Part 60), Unclassified Area, API#: 43-013-52554 Page 8

ACRONYMS

The following lists commonly used acronyms and associated translations as they apply to this document:

40 CFR Title 40 of the Code of Federal Regulations

AO Approval Order

BACT Best Available Control Technology

CAA Clean Air Act

CAAA Clean Air Act Amendments

CDS Classification Data System (used by EPA to classify sources by size/type)

CEM Continuous emissions monitor

CEMS Continuous emissions monitoring system

CFR Code of Federal Regulations CMS Continuous monitoring system

CO Carbon monoxide CO₂ Carbon Dioxide

CO₂e Carbon Dioxide Equivalent - 40 CFR Part 98, Subpart A, Table A-1

COM Continuous opacity monitor

DAQ Division of Air Quality (typically interchangeable with UDAQ)
DAQE This is a document tracking code for internal UDAQ use

EPA Environmental Protection Agency

FDCP Fugitive dust control plan

GHG Greenhouse Gas(es) - 40 CFR 52.21 (b)(49)(i)

GWP Global Warming Potential - 40 CFR Part 86.1818-12(a)

HAP or HAPs Hazardous air pollutant(s)

ITA Intent to Approve LB/HR Pounds per hour

MACT Maximum Achievable Control Technology

MMBTU Million British Thermal Units

NAA Nonattainment Area

NAAQS National Ambient Air Quality Standards

NESHAP National Emission Standards for Hazardous Air Pollutants

NOI Notice of Intent NO_x Oxides of nitrogen

NSPS New Source Performance Standard

NSR New Source Review

 PM_{10} Particulate matter less than 10 microns in size $PM_{2.5}$ Particulate matter less than 2.5 microns in size

PSD Prevention of Significant Deterioration

PTE Potential to Emit R307 Rules Series 307

R307-401 Rules Series 307 - Section 401

SO₂ Sulfur dioxide

Title IV Title IV of the Clean Air Act
Title V Title V of the Clean Air Act

TPY Tons per year

UAC Utah Administrative Code

UDAQ Utah Division of Air Quality (typically interchangeable with DAQ)

VOC Volatile organic compounds